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PROBLEMATA
ET
THEOREMATA
Geometrica, & Mechanica
Publicè demonſtranda,

AC PERILL. ET REVERENDISS. P. D.

D. PAVLO SCOTO
Congreg. Caſinen. Præſidi Vigilantiſs.

Dicata

A

D. VICTORINO A PARMA
Eiuſdem Congregationis Monacho,

AC

Perilluſt. & Doctiſſimi Domini Alphonſi de Isè
Mathematicarum Lectoris Alumno.

BIBLIOTECA NAZIONALE VITTORIO EMANUELE III
NAPOLI

BONONIÆ, Typis Clementis Ferronij 1633.
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PERILLVSTRI, AC REVERENDISSIMO PATRI DOMINO, D. PAVLO SCOTO Congreg. Caſinen. Præſidi Generali.

D. Victorinus à Parma eiuſd. Congreg. Monachus F.

ADmirabiles perſcrutanti Naturæ latebras, Reuerendiſſime Pater, quicquid honorabilium, diuinum quicquid, ac prodigioſa quadam pulchritudinis honeſtate diffunditur, nihil mihi iucundius; nullius quoque ſuauitate pellectus, quam quicquid Mathematicarum adſpectabile ſcientiarum ingenioſo quodam periclitationis, contemplationisq; labore congenuit, ac in vnum quaſi concentum humanus nexuit intellectus. Eò .n. ſeſe compellit Mathematicæ præſtantia, ac nobilitas, vt non immeritò diuinus ille Philoſophiæ Opifex proclamauerit Plato, non aliam ob cauſam cuncta animantium genera

(ſi humanum excipias) irrationalitatis irretita calumnijs, quàm quia non belluarum, ſed hominis eſt imperium numerorum recenſendi Naturas. Verùm quid hac ſcientia certius? Quid in illuſtri facis præſtantia euidentius, ac laudabilius? vt ipſum veritatis robur non inficiar, ac certitudinis firmitatem? Qua de re tanta incenſus leporis varietate, huius tantillum ſcientifici prælibaui nectaris, quod non ſub altiori Patrocinij tutela in lucem edere arbitror, quàm eius, qui noſtræ Religioni Mæcenas ſapientiam ipſam ab ineſtricabilibus ignorantiæ tenebris reuocauit; quàm qui in præclaro tot illuſtrium virorum Theatro gloriæ author, atq; in virtutum omnium genere præſtantior alter Titanis æmulator Caſinenſis familiæ Orbem irradias vniuerſum. Cur ergo mei intellectus partum hunc fulgentiſſimo Solis aſpectui obijcere non incumbam, vt prælucentibus tantæ lucis radijs in ſublimem euectus ſcientiarum regionem vaporis inſtar illuſtri condecoretur ſapientiæ venuſtate.

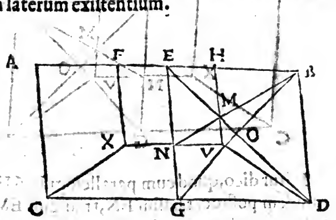
Vale.

PRI-

PRIMA PROPOSITIO.

PROBLEMA I.

Datum parallelogrāmum ità in quatuor partes æquales diuidere, vt vna ex illis ſit parallelogrammum prædicto æquiangulum, vnum latus habens, quod ſit pars lateris dati parallelogrammi vtcunque ſumpti, & relinquat hincinde portiones æquales: reliqua poſteà ſpatia ſint tria trapetia, facta ex iũctione punctorum angulorum è regione prædictorum laterum exiſtentium.



Sit vtcunque parallelogrāmum B C; oportet ipſum diuidamus, vt dictum eſt in propoſitione. Vt hoc efficiamus, ſecetur A B [a] bifariam in puncto E, & per punctum E, agatur [b] E G, [a] 10. pri.

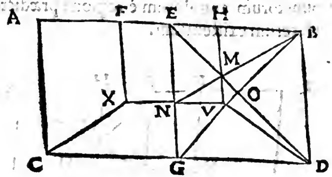
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b 31. pri. [b] E G, parallela A C, vel B D; poſtea ducantur [c] diametri parallelogrãmi B G, ideſt B G, E D, quæ mutuò [d] ſe ſecent in puncto O, ducatur deinde à puncto B, intra triangulum E O G, recta aliqua linea taliter, vt ipſum bifariam diuidat; & hoc fiet juxta illud, quod à multis eſt demõſtratum, & præcipuè à Tartalea in quinta parte generalis Tractatus numerorum, & menſurarum lib. primo cap. 13. nu. 22. & hoc opus abſoluat linea BMN, poſteà per [e] puncta M, N, ducantur parallelæ lateribus E G, EB, ſcilicet H V, ipſi, E G, & N V, ipſi, E B.

c 1. poſt.

d ſchol. P. Clau. prop. 34. lib. pri.

e 31. pri.



Igitur dico, quod cum parallelogrãmũ H N, eamdem poſſideat baſim EN, trianguli EMN, & ſit æque altum, ac triangulum, [f] erit parallelogrammum H N, duplum, trianguli E M N, ſed etiam triangulum E O G, ex hypoteſi eſt duplum trianguli E M N; Igitur [g] triangulũ E O G, eſt æquale parallelogrammo H N, ſed trian-

f 41. pri.

g 6. axioma.

triãgulũ EOG, eſt quarta pars parallelogrãmi,
BG, (cũ facilè *b* poſſit demõnſtrari illa quatuor *b 10. pri. de æquipõd. Archim.*
triãgula EOG, GOD; DOB, BOE, eſſe inter
ſe æqualia) ergo etiam parallelogrammũ H N,
erit quarta pars parallelogrãmi E D; ſimiliter
ſi ãbſcindatur F E, æqualis ipſi E H, & cõplea-
tur parallelogrãmum FV; cõſimili methodo de-
monſtrabimus, quod parallelogrãmum FN, eſt
quarta pars parallelogrãmi AG; vnde *i* erit to- *i 1. quin.*
tum parallelogrammũ FV, quarta pars paralle-
logrammi AD; cuius latus FH, eſt pars lateris
AB, quod *l* relinquit duas partes hincinde AF, *l 3. axio.*
HB, ſimiliter æquales, & eſt ipſi AD, æquian-
gulũ. Iungantur *m* modò pũcta XC, VD, dico *m 1. poſt.*
etiam ipſum trapetium HVDB, eſſe quartam
partẽ parallelogrãmi AD; quia cum in triãgu-
lo DEB, ſit ducta HM, ipſi DB, parallela; *n* erit *n 2. Sex.*
vt BH, ad HE, ideſt ad NV, ita DM, ad ME;
ſed vt B H, ad NV, ita *o* eſt HM, ad MV; cum *o 4. Sex.*
triangula HMB, & NMV, ſint ſimilia; igitur,
p vt DM, ad ME, ita eſt HM, ad MV, & *q* ſunt *p 11. quin.*
circa duos angulos æquales VMD, EMH, late- *q 15. pri.*
ra reciproca, ergo *r* triangulũ VMD, eſt æqua- *r 15. Sex.*
le triangulo EMH; addito communi trapetio
HMDB, erit *ſ* trapetium HVDB, æquale triã- *ſ 2. axio.*
gulo EDB; ſed triangulũ EDB, eſt quarta pars
parallelogrãmi A D, vnde *t* & trapetium HV- *t 2. axio. quin.*
DB, erit quarta pars parallelogrammi AD.

Eo-

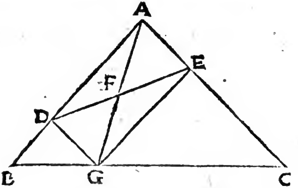
Eodem modo demonſtrabimus trapetiū CXFA, ſimiliter eſſe quartam partem eiuſdem parallelogrammi AD. Igitur remanebit trapetium CXVD, ſimiliter quarta pars parallelogrammi AD. Quod erat faciendum.

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SECVNDA PROPOS.

THEOREMA I.

SI in quocunq; triangulo duo latera proportionaliter diuidantur; homologis tamen non ex eadem parte exiſtentibus, & ſectiones iungantur recta linea, quæ etiam bifariam diuidatur, ad quod diuiſionis punctum pariter ducatur recta linea à pũcto, in quo conueniunt recta latera, & protrahatur vſq; ad oppoſitum latus, ipſum in eamdem rationem cum ſectis lateribus partietur. Quæ etiam bifariam ſecabitur à prædicta bifariam ſecta.

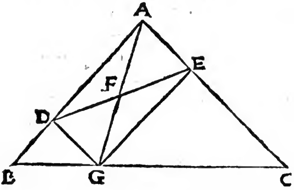


Sit triangulum quodcunq; ABC; ſit autem quoduis eiuſdem latus AC, vtcunq; diuiſum, vt in E. & fiat, [a] vt CE, ad EA, ſic AD, ad DB; iuncta [b] autem DE, ſit ipſa [c] bifariam ſecta

a 12. Sext.
b 1. poſt.
c 10. pri.

B ... cta

d 1. poſt. ẽa in F; & iũẽa [d] AF, ſit [e] produẽa ad BC, cui
e 2. poſt. occurrat in G. Dico CG,ad GB,eſſe,vt AD, ad
DB; ſiuè vt CE, ad EA, & AG, eſſe bifariam in
f 1. poſt. F, diuiſam. Iungantur [f] DG, GE.



g 1. ſex. Cũ triangula ADF, AFE, ſint æquè alta [g] erunt inter ſe vt eorũ baſes DF, FE; ſed ex hypo-
h 11. quin. teſi DF,eſt æqualis ipſi FE, igitur [h] & triangulũ ADF, erit æquale triangulo AFE. Eodem modo oſtendetur triangulũ DFG,æquale eſſe triãgulo FGE; ſed oſtenſum eſt triangulum DFA, æquale eſſe triangulo AFE, ſi ergo æqualibus æqualia adijciantur, nempè ſi triangulũ EFG, triãgulo EFA,iũgatur,& triangulũ DFG, triã-
i 2. poſt. gulo ADF, erit totum triangulum ADG, toti
l 1. ſex. triangulo AGE, æquale. Pariter [l] erit triangulum CEG,ad triangulum EAG, vt CE, ad EA; ſed vt CE, ad EA, ita eſt AD, ad DB,ex hypo-
m 11. quin. teſi, [m] ergo vt triangulum CEG,ad triangulum

EAG,

EAG, ita AD, ad DB; ſed vt A D, ad D B, n ita triangulũ ADG, ad triangulũ DBG; ergo, n 1.ſex.
o vt triangulum CEG, ad triangulum EAG, ita o 11. quin.
triangulũ ADG, ad triangulum DBG. Et componendo p vt triangulum CAG, ad triangulum p 18. quin.
EAG; ita triangulũ ABG, ad triangulũ DBG.
Et permutando, q vt triangulum CAG, ad triãgulum ABG; ita triãgulum EAG, ad triangulum DBG; ſed vt triangulum CAG, ad triangulum ABG, r ita eſt CG, ad GB; igitur, ſ vt triangulum EAG, ad triãgulum DBG, ita CG, ad GB; ſed triangulum EAG, eſt æquale triangulo ADG, ergo vt CG, ad GB; t ita triangulum ADG, ad triangulum DBG; ſed vt triangulum ADG, ad triangulũ DBG; u ita eſt etiam AD, ad DB; igitur vt AD, ad DB; ſeu CE, ad EA, ita eſt CG, ad GB; quod eſt primũ propoſitum.

q 16 quin. r 1. Sex. ſ 11. quin. t 11. quin. u 1. ſex.

Dico etiam AG, eſſe bifariam diuiſam in F; Cum enim DG, ſecet latera AB, CB; trianguli ACB proportionaliter in D, G; x erit D G, parallela ipſi AC; & eodẽ modo oſtendemus ipſam GE, eſſe parallelam ipſi AB; ergo y DG, erit æqualis ipſi AE; ſed DF, æqualis eſt FE, ex hypoteſi, ergò vtraq; GD; DF, vtriq; AE; EF, eſt æqualis; & z anguli AEF; GDF, ſunt æquales; Vnde per quartam primi erit AF, ipſi FG, æqualis. Quod erat demonſtrandum.

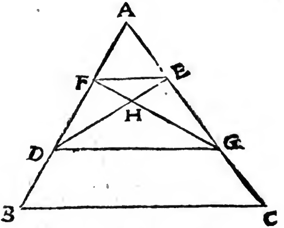
x 2. ſex. y 26. pri. z 29. pri.

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TERTIA PROPOSITIO.

THEOREMA II.

SI in quocunq; triãgulo duo latera proportionaliter diuidantur, homologis tamen non ex eadem parte conſtitutis, & ſectiones iungantur; ac per eaſdem parallelæ agantur ipſius baſi, donec lateribus occurrant; iunganturq; occurſuum puncta recte linea; altera parallelarum ad reliquam erit, vt portio vtriuſlibet ſecti lateris ad reliquam portionem; ac earundem parallelarũ extrema diametraliter iungentes, in eandem prædictæ rationem ſeſe viciſſim interſecabunt.



Si trianguli ABC, duo latera CA; AB, propor-

portionaliter diuidãtur; & fiat, [a] vt CE,ad EA; ita AD, ad DB; & à punctis D, E, [b] agantur parallelæ baſi BC, ipſæ, DG, FE, [c] iunganturque DE,FG, quæ mutuò ſe ſecent in puncto H. Dico eſſe,vt CE,ad EA; ſiue AD,ad DB, ita DG, ad FE;GH,ad HF;& DH,ad HE. Nam cũ FE, ſit parallela baſi BC, [d] erit vt CE,ad EA,ita BF, ad FA; ſed vt CE, ad EA, ita ex hypoteſi eſt AD, ad DB; [e] vnde erit, vt AD, ad DB, ita BF, ad FA. [f] Et componendo,vt BA,ad AF;ita AB, ad BD; vnde per ſeptimã Quinti AF, eſt æqualis ipſi DB. Et quia FE, eſt parallela ipſi DG; erit ob [g] ſimilitudinẽ triangulorũ FHE; DHG. vt DH, ad HE; ita GH, ad HF; & DG, ad FE; ſed vt DG,ad FE, [h] ita eſt DA,ad AF;& vt DA, ad AF; ita eſt BF, ad FA, cum ſit demonſtrata BD, æqualis ipſi FA. Vnde vt [i] DG, ad FE, ita BF,ad FA; ſed vt BF,ad FA;ita eſt CE,ad EA; vnde erit, vt CE, ad EA; ita DG, ad FE; GH, ad HF; DH, ad HE; quod oportebat demonſtrare.

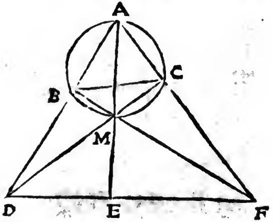
a 12. ſex.
b 31. pri.
c 1. poſt.
d 2. ſex.
e 11. quin.
f 18. quin.
g 7. ſex.
h 4. ſex.
i 11. quin.

QVAR-

QVARTA PROPOSITIO.

PROBLEMA I.

IN omni triãgulo plano acutiãgulo, ſi à duobus quibuſuis angulis ad oppoſita latera ꝑpẽdiculares demittãtur;illæ ſeſe intra triangulum mutuo ſecabunt; quod ſi à tertio angulo ad dictum ſectionis pũctum ducatur recta linea, eaq́ue producatur vſque ad oppoſitum latus, illi perpendiculariter occurret, treſq́ue dictæ perpendiculares in tales rationes ſecabuntur, vt ſegmenta cuilibet laterum cõterminantia bina ſint in eadem ratione cum reliquis earũ ſegmẽtis, exiſtente earum analogia perturbata.



Sit triangulum quodcunque acutiangulum ADF; à duobus autem angulis quibuſcunq; D,

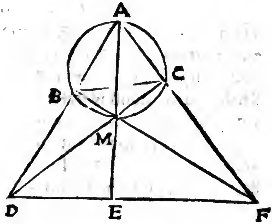
F, a

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F, [a] cadant in oppoſita latera perpendiculares *a 12. pri.*
DC; FB, illis incidentes in C, B; iſtæ ſe intra
triangulum interſecabunt; ſecentur vt in M,
[b] iuncta ergo AM, & [c] producta vſq; ad EF, cui *b 1. poſt.*
incidat in E. Dico A, E, perpendicularem eſſe *c 2. poſt.*
ipſi DF; & tres ſubinde perpendiculares DC,
FB, AE, ſeſe in tales, quales diximus rationes
ſecare in puncto M. [d] Iungatur aũt BC. Quoniã *d 1. poſt.*
ergo in quadrilatero ABMC, anguli ABM, AC
M, ſunt recti ex hypoteſi; erunt [e] reliqui anguli *e 22. ter.*
BMC; CAB, æquales duobus rectis, etenim cu-
iuſcunq; quadrilateri quatuor anguli æquãtur
quatuor rectis, cum in duo triãgula ſit reſolubi-
le; ergo erit quadrilaterum ABMC, circulo in-
ſcriptibile. [f] Sit inſcriptum circulo ABMC, & *f 22. ter.*
quia anguli BAM, BCM, ſunt in eadem por-
tione; [g] ideo erunt æquales. Vlterius, quia in *g 21. ter.*
duobus triangulis FAB, DAC, anguli FBA;
DCA, ſunt recti ex hypoteſi, [h] ideo erunt æqua- *h 12. axio.*
les; & DAC, eſt communis; [i] & reliqui ergo e- *i 8. pri.*
runt etiam æquales. [l] Et ipſa triangula FAB; *l 4. ſex.*
DAC, æquiangula; vnde [m] vt FA, ad AB; ſic e- *m 4. ſex.*
rit DA, ad AC; & permutando [n] vt FA, ad AD; *n 16. quin.*
ſic erit BA, ad AC; & ſunt circa communẽ an-
gulum BAC, latera proportionalia; ergo [o] trian- *o 6. ſex.*
gula DAF, BAC, erunt ſimilia; & angulus [p] B *p 6. ſex.*
CA, æqualis ipſi ADF; & cum angulus DBF, ſit
rectus, [q] reliqui BDF, BFD, erunt vni recto æ- *q 32. pri.*

quales;

quales; ſed etiam angulus A C D, eſt rectus,
r 1. axio. ergo r anguli BDF; BFD, erunt angulo ACD, æquales, ſed angulus ACB, eſt æqualis angulo B D F, ergo reliquus B C M, erit æqualis angulo BFD; ſed ipſi BCM, oſtenſus eſt æqualis ip-



ſ 1. axio. ſe BAM, ſ ergo BAM, æquabitur ipſi BFD. Cõmunis autem duobus triangulis ADE, BFD,
t 4. pri. 32 eſt angulus BDE, t ergo reliquus FBD, reliquo AED, ęqualis erit; ſed FBD, rectus eſt ex hy-
u 10. defin. potheſi, ergo rectus etiam erit AED, u & ſubinde AE, erit perpendicularis ipſi DF.

Cum verò triangula FMC, DMB, ſint æquiangula ex eo, quod FCM, DBM, anguli ſint re-
x 15. pri. cti; x & CMF, BMD, qui ſunt ad verticem æ-
y quales, & y ſic etiam reliqui ſint æquales CFM,
z 4. ſex. MDB, ideò z erit vt FM, ad MC, ita DM, ad MB;

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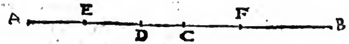
MB; & ſimiliter, [a] vt CM, ad MA; ita EM, ad MD, quia triangula CMA, DME, pariter ſunt æquiangula; quapropter tria perpẽdicularium ſegmenta MF, MC, MA, conterminantia lateri AF, oſtenſa ſunt, bina eſſe in eadẽ proportione cũ reliquis ſegmentis ME, MD, MB, eorũ analogia perturbata exiſtente. Conſimili methodo oſtendemus tria ſegmenta MF, ME, MD, conterminãtia lateri DF, bina eſſe in eadem ratione, cũ reliquis ſegmentis MC, MA, MB: [b] nam vt FM, ad ME; ita AM, ad MB, cum triangula AMB, MEF, ſunt ſimilia; & vt EM, ad MD, [c] ita CM, ad MA; cum ſint triangula AMC, DME, ſimilia: Similiter oſtendemus tria perpendicularium ſegmenta MD, MB, MA, conterminantia lateri AD, bina eſſe in eadem proportione cũ reliquis ſegmentis ME, MF, MC, exiſtente eorum analogia perturbata: nam vt AM, ad MB; [d] ita FM, ad ME; cum triangula AMB, FME, ſint ſimilia; & vt BM, ad MD; [e] ita CM, ad MF, cum triangula BMD, CMF, ſint ſimilia; Quod opus erat oſtendere.

[a] 4. ſex.
[b] 4. ſex.
[c] 4. ſex.
[d] 4. ſex.
[e] 4. ſex.

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LEMMA.

Qualibet data linea bifariam, & non bifariam diuiſa; iterũ ſi partes inæquales bifariã diuidãtur; medietas minoris erit æqualis differentiæ, in qua medietas totius ſuperat medietatem maioris.

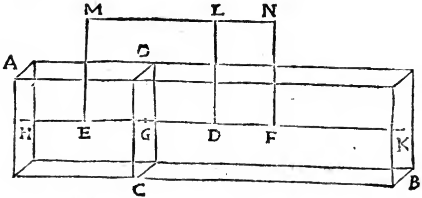


a 10. pri. Sit data recta linea AB, [a] bifariam in C, diuiſa, & non bifariam in D; rurſusq; AD, diui-
b 10. pri. datur bifariam in E, [b] & DB, maior bifariã in F. Dico DE, medietatem minoris AD, eſſe æqualem CF, differẽtiæ, in qua CB, medietas totius AB, ſuperat FB, medietatem maioris DB, ideſt CF. Nam cum tota AB, ad totã CB, ſit vt pars ablata DB, ad partem ablatæ FB, etenim AB, eſt dupla ipſius CB; vt DB, eſt dupla ipſius FB,
c 19. quin. [c] erit etiam reliqua AD, ad reliquam CF, vt tota AB, ad totã CB; ergò etiam AD, eſt dupla ipſius CF; ſed etiam ex hypoteſi eſt dupla ipſius ED, cum ſit AD, bifariam in E, diuiſa;
d 2. axio. quin. [d] ergo ED, erit æqualis ipſi CF; quod opus erat demonſtrare.

THEO-

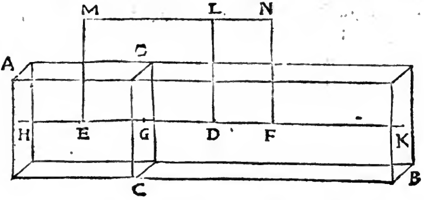
THEOREMA MOECANICVM.

SI priſma à plano baſi parallelo ſit non bifariam diuiſum, & accepta ſint cẽtra grauitatis totius, inæqualiumq; partiũ; diſtantiæ intra centra poſitæ, ſunt in eadem ratione, ac grauitates dictarum priſmatis partium, ſed permutata.



Sit priſma AB, per planum CO, baſi AH, æquidiſtans non bifariam diuiſum in AC, OB; & axis priſmatis AB, ſit KH; qui ſi bifariam in puncto D, diuidatur, manifeſtum eſt (per octauam de centro grauitatis ſolidorũ Fed. Cõmandini) centrum grauitatis priſmatis AB, eſſe pũctum D; ſed cum priſma AB, ſit in duo priſmata AC, OB, diuiſum, quorum axes HG, GK, ſint bifariam diuiſi in punctis E, F, etiam per eandem Cõmandini manifeſtũ eſt, E, eſſe centrum

grauitatis priſmatis minoris AC; & F, centrũ, maioris OB; iuncta igitur EDF, quæ erit vna recta linea, ex octaua propoſitione de æquipõderantibus Archimedis; Dico, ita ſe habere graue AC, ad graue OB, vt FD, ad DE.



Etenim, quoniam priſma AC, ad priſma OB, [a] habet eamdem rationem, quam habet HG, ad GK, ſed vt HG, ad GK; [b] ita ſe habet EG, ad GF; vnde [c] vt priſma AC, ad priſma OB; ita erit EG, ad GF; ſed EG, eſt æqualis, ex ſupra demonſtrato lemmate, ipſi DF, addita communi GD; erit [d] ED, æqualis FG; & ideò vt EG, ad GF; ita erit FD, ad DE; ſed vt EG, ad GF; ita eſt graue AC, ad graue OB; igitur [e] vt graue AC, ad graue OB; ita eſt FD, ad DE. Quod erat demõſtrandum.

a 19. propoſ. de centro grauit. ſolid. Fed. Cõmand.

b 15. quin.

c p 11. quin.

d 2. axio.

e per 11. quin.

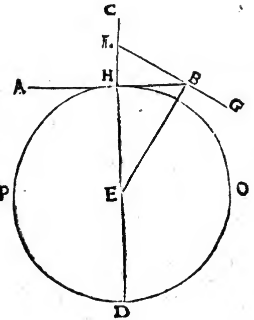
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QVINTA PROPOSITIO.

PROBLEMA II.

DAta diſtantia vnius tantùm plani milliarij; Quantitatem ſemidiametri Terræ inuenire.



Sit tota terra PO, intelligaturq́; in ipſa terra circulus maximus HPDO; cuius centrum ſit E; [a] quod pariter erit centrum terræ; & à puncto H, ducatur linea AHB, [b] quæ tangat circulum in puncto H; necnon à pũcto H, ipſi AHB,

a 6. pri. de ſphær. Theod.

b 17. tertij.

eri-

c 11. pri. [c] erigatur perpendicularis HC; quæ producta verſus D, [d] trãſibit per E, centrum Terræ; Sitq; HB, diſtantia vnius plani milliarij; & à puncto B, intelligatur linea B E, ad centrum E, producta; mox à puncto B, agatur ad angulos rectos ſuper lineam EB; recta LBG, quæ producta verſus L, concurret cum EH, ad C, producta; nam cum angulus BHE, trianguli BHE, ſit rectus [e] angulus HEB, erit acutus; & cum angulus EBL, vt rectus, & angulus HEB, acutus; [f] duo anguli LBE, LEB, erunt minores duobus rectis; vnde [g] EH, BL, concurrent ad eam partem, vbi ſunt anguli minores duobus rectis; concurrant in puncto L. Modo conſideretur triangulum LBE, ab angulo, cuius LBE, recto ad baſim LE, eſt ducta recta BH, ad angulos rectos; quæ per octauã ſexti erit media proportionalis inter LH, HE; nam eſt vt LH, ad HB; ita HB, ad HE; & ideò quadratũ HB, erit æquale rectãgulo ex LH, HE; vnde cum HB, ſit nota ex hypoteſi, cum ſit milliarium, & LH, etiam poſſit cognoſci quanta ſit; Si HB, in ſeipſam multiplicetur, & productũ diuidatur per notam LH, prodibit quantitas HE, ſemidiametri Terræ: nam cum ex tribus rectis lineis proportionalibus duæ nobis cognitæ ſint, [h] etiam reliquã HE, nobis innoteſcere neceſſe eſt. Quod erat faciendum.

d 19. ter.

e 32. pri.

f 17. pri.

g Schol. P. Clauij 28. pri.

h 6. pri. de triang. montis Regij.

CO-

COROLLARIVM.

ASTronomi, tàm antiqui, quàm moderni, ad indagationem quantitatis Terræ, multiplici via proceſſerunt. Ptolomæus.n. per quadrantẽ obſeruauit; *Quot gradus in meridiano inter vtramq; ſtellam fixam prænotati intercipiebantur, ſeu* quantus eſſet arcus meridiani inter vertices aſſumptorum locorum; & tot etiam in arcu terręſtri contineri neceſſario concludebat; Tàm Terræ, quàm Firmamenti ambitum maximum in partes 360. qui gradus dici ſolent, diuidendo. Seu alij ex duobus diuerſis locis Poli altitudines obſeruabant; ſub eodem tamen meridiano, quæ binæ altitudines neceſſariò tanto meridiani arcu diſcrepabant, quantus erat arcus terręſtris meridiani inter eadem duo loca interiectus. Eratoſthenes ſimiliter duas eligebat Vrbes, quæ ſub eodem eſſent meridiano. Poſſidonius autem alia via proceſſit, ſed Franciſcus Maurolipus ſemidiametrum Terræ indagauit; eligendo montem editiſſimum. Qui Auctores inter ſe circa Terræ quantitatem diſcrepabant, ita vt ſemper recentiores, & recẽtiores fecerint Terræ ambitum minorem, & minorem.

Horum Auctorum methodus eſt aliquanto difficilis quoad praxim, & modum exequendi; vnde ex ſuperiori noſtro problemate admodũ

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faciliori, & certiori via valębis, ad inueſtigationem quantitatis Terræ facillimè peruenire. Et quia nõnullis grauiſſimis Viris viſum eſt hoc problema quoad Theoricam, & ſpeculationem valdè pulchrum; ſed quoad praxim, & modum exequendi dubitant, non poſſe facilè pertractari, modum forſitan neſcientes, quo talem rem experiri velimus; Ideò Perilluſtris, ac doctiſsimus Alphonſus de Isè Præceptor meus, omnibus ſe exhibet totum hoc exequi, & practicè demonſtrare.

Ex hoc etiam problemate patet verus modus librandi ſitus, vel ad aquas conducendas, vel ad aliud faciendum.

Demonſtrabuntur publicè ab eodem, qui ſupra, in Comitijs Generalibus Congregationis Caſinenſis, habendis in Monaſterio S. Ioan. Euangeliſtæ de Parma; Anno Domini 1633. Menſis Aprilis, Die Hora

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